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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,976	12/21/2001	D. Clint Seward	050676.1006-103	2543
30407 75	590 02/11/2005		EXAM	INER
BOWDITCH & DEWEY, LLP			QUARTERM	an, Kevin j
	161 WORCESTER ROAD P.O. BOX 9320 ART UNIT PAPER N		PAPER NUMBER	
FRAMINGHA	M, MA 01701-9320		2879	<u> </u>

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/034,976	SEWARD, D. CLINT
Office Action Summary	Examiner	Art Unit
	Kevin Quarterman	2879
The MAILING DATE of this communicateriod for Reply	ion appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communic - If the period for reply specified above is less than thirty (30) da - If NO period for reply is specified above, the maximum statuto - Failure to reply within the set or extended period for reply will; Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, however, may a reation. 19, a reply within the statutory minimum of thirt ry period will apply and will expire SIX (6) MON by statute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).
atus		
Responsive to communication(s) filed of 2a) This action is FINAL . 2b) Since this application is in condition for closed in accordance with the practice of the state of the	This action is non-final. allowance except for formal matt	• •
sposition of Claims		
4a) Of the above claim(s) is/are v 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>1-20</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction		· · · · · · · · · · · · · · · · · · ·
oplication Papers		
9)⊠ The specification is objected to by the Ex 10)⊠ The drawing(s) filed on <u>21 December 20</u> Applicant may not request that any objection Replacement drawing sheet(s) including the 11)□ The oath or declaration is objected to by	<u>r01</u> is/are: a)⊠ accepted or b)☐ n to the drawing(s) be held in abeyan correction is required if the drawing(ce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d)
iority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for the a) All b) Some * c) None of: 1. Certified copies of the priority document of the copies of the priority document of the copies of the copies of the application from the International * See the attached detailed Office action for the copies of the certified copies of the	suments have been received. suments have been received in A ne priority documents have been Bureau (PCT Rule 17.2(a)).	pplication No received in this National Stage

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date <u>0204</u>.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

6) Other: ____.

5) Notice of Informal Patent Application (PTO-152)

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DETAILED ACTION

Priority

1. The current status of the nonprovisional parent application should be included in the reference to the prior application in the first sentence of the specification.

Specification

- 2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 3. The following title is suggested: --PROPULSION SYSTEM WITH TOROIDALLY SHAPED CONTAINMENT SYSTEM--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Aston (US 5646476).
- 6. Regarding independent claim 1, Figure 1A of Aston shows a propulsion system comprising a toroidally shaped charged particle containment system; a propellant injection port (33); a propellant ionizer (14); and an exhaust port (37).
- 7. Regarding claim 2, Aston discloses the injection portion comprising a gas injection port (col. 4, In. 62).

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- 8. Regarding claim 3, Aston discloses a plurality of electrons stored in the containment system (col. 6, In. 14-17).
- 9. Regarding claim 4, Aston discloses that the containment system is positively charged (col. 5, In. 44-50).
- 10. Regarding claim 5, Figure 1A of Aston shows a chamber having the injection port on one side and the exhaust port on the opposite side.
- 11. Regarding claim 6, the propellant of Aston inherently comprises air, since Aston discloses that the propulsion system is intended for atmospheric use (col. 9, ln. 32-58).
- 12. Regarding claim 7, the propellant of Aston comprises a fluid (gas).
- 13. Regarding independent claim 8, Figure 1A of Aston shows a propulsion system comprising a cylindrical electron containment system, the system containing a plurality of electrons circulating in a toroidal shape (col. 6, In. 14-17); a propellant injection port (33) on the system; and an exhaust port (37) on the system.
- 14. Regarding claim 9, Figure 1A shows the containment system comprising a toroidally shaped housing.
- 15. Regarding claim 10, Aston discloses a plurality of electrons stored in the containment system (col. 6, In. 14-17).
- 16. Regarding claim 11, Aston discloses that the containment system is positively charged (col. 5, In. 44-50).
- 17. Regarding claim 12, Figure 1A of Aston shows a chamber having the injection port on one side and the exhaust port on the opposite side.

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18. Regarding claim 13, the propellant of Aston inherently comprises air, since Aston discloses that the propulsion system is intended for atmospheric use on the ground (col. 9, In. 32-58).

- 19. Regarding claim 14, the propellant of Aston comprises a fluid (gas).
- 20. Regarding independent claim 15, Figure 1A of Aston shows a propulsion system comprising an electron containment system housing; an air inlet port (33) on the housing; a plurality of electrons in the housing that are capable of heating air flowing through the housing during ground use (col. 6, ln. 14-17); and an exhaust port (37) on the housing.
- 21. Regarding claim 16, Figure 1A shows the containment system comprising a toroidally shaped housing.
- 22. Regarding claim 17, Aston discloses that the containment system is positively charged (col. 5, In. 44-50).
- 23. Regarding claim 18, Figure 1A of Aston shows a chamber having the injection port on one side and the exhaust port on the opposite side.
- 24. Regarding claim 19, Aston discloses a magnetic field within the housing that contains the electrons (col. 6, In. 14-17).
- 25. Regarding claim 20, Figure 1A of Aston shows the housing comprising a dielectric material (43).

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman Examiner Art Unit 2879

5 February 2005

Joseph Williams Primary Examiner Art Unit 2879